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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,766	11/17/2003	Takeaki Nakamura	17264	3358

23389 7590 09/13/2005

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EXAMINER

KASZTEJNA, MATTHEW JOHN

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,766

Applicant(s)

NAKAMURA, TAKEAKI

Examiner

Matthew J. Kasztejna

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 18 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Notice of Amendment

In response to the amendment filed on June 17, 2005, amended claim 1 is acknowledged. Claims 1-21 stand rejected under 35 U.S.C. 103(a). The following reiterated grounds of rejection are set forth:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,602,185 to Uchikubo in view of U.S. Patent No. 6,659,939 to Moll et al.

In regards to claims 1, and 4, Uchikubo discloses a remote operation support system comprising: a first control system 24 disposed in an operating room 5; a second control system 32 disposed in a primary support room 6; wherein the a first control system which comprises: an imaging device 10 for imaging a portion to be treated of a patient under operation to obtain an image signal; a first transmission/reception device 27 for transmitting the image signal supplied from the imaging device to the second control system, simultaneously transmitting patient information regarding the patient under operation to the third control system, and receiving support information from the second control system; and a reproduction device 22 for displaying the image signal and reproducing the support information (see Fig. 1). Uchikubo is silent with respect to

Art Unit: 3739

a third control system located in a secondary support room. Moll et al. teach of an analogous remote telesurgical system which is capable of having multiple master control rooms in which several master surgeons are available to offer support to the surgeon in the operating room. Therefore, a third control system would be present in a secondary support room (see Fig. 27). This third control system would be inherently connected to the control systems in both the primary support room and the operating room, enabling cooperative surgery (see Col. 45, Lines 50-56). It would have been obvious to one skilled in the art to have at least one secondary support room with a third control system in the system of Uchikubo to provide numerous advantages. As taught by Moll et al. having multiple master surgeons and additional support rooms would ensure the master surgeon does not have to scrub in and out of every procedure. Further, the master surgeon may become extremely specialized in performing part of a surgical procedure by performing just that part of a procedure over and over on many more patients than he otherwise would be able to treat. Thus, particular surgical procedures having distinct portions might be performed much more quickly by having multiple surgeons, with each surgeon each performing one part of the procedure and then moving onto another procedure, without scrubbing between procedures. Moreover, if one or more patients (for whatever reason) would benefit by having a surgeon actually be present, an alternative surgeon (different from the master surgeon) may be on call to one or more operating rooms, ready to jump in and address the patient's needs in person, while the master surgeon moves on treat another patient.

Due to increased specialization, further advances in the quality of medical care may be achieved (see Col. 46, Lines 26-52).

In regards to claims 2-3, Uchikubo discloses a remote operation support system which is capable of having two-way communication between each control system (see Fig. 1), but is silent with respect to one-way communication between control systems. The remote control system of Moll et al. teach of the capability of each control system being independent of each other (see Col. 45, Lines 25-28). It would have been obvious to one skilled in the art at the time the invention was made to have independent control systems in the system of Uchikubo to enable multiple surgeons to work on independent aspects of surgery at the same time as taught by Moll et al. (see Col. 45, Lines 15-56).

In regards to claims 5, Uchikubo discloses a remote operation support system but is silent with respect a switch for switching between control systems. Moll et al. teach of an analogous remote operation support system having a switch 958 for switching between control systems (see Col 46, Lines 1-25). With the addition of a third control system and a secondary support room, the switch would be inherently capable of switching between both the third and second control systems or all three control systems. It would have been obvious to one skilled in the art at the time the invention was made to include a switch in the system of Uchikubo in order allow control over the desired support being transmitted to the operating room as taught by Moll et al.

In regards to claim 6, Uchikubo discloses a remote operation support system, wherein the imaging device includes an endoscopic imaging device 9 having an imaging

Art Unit: 3739

optical system and an imaging element to image a body cavity, and the first control system further comprises: an image processing unit 14 for converting the image signal, obtained by photoelectric conversion through the imaging element of the endoscopic imaging device, into a video signal; and a first display 22 for displaying an endoscopic image based on the video signal converted and generated through the image processing unit (see Col. 4, Lines 23-54).

In regards to claim 7, Uchikubo discloses a remote operation support system, wherein the first control system further comprises: a visual-field control unit for controlling an imaging area or the viewing direction of the endoscopic imaging device; and a first control unit for controlling at least the visual-field control unit, at least one of the second and third control systems further includes: a second control unit for generating an instruction signal to control the visual-field control unit to the first control unit, and the instruction signal generated through the second control unit is transmitted to the first control unit to control the imaging area or the viewing direction of the endoscopic imaging device (see Col. 1, Lines 55-60). Moll et al. disclose the capability of the surgeons to control the movement of the imaging device (see Col. 45, Lines 50-56).

In regards to claims 8-21, the remote control system of Uchikubo and Moll et al. is considered to be inherently capable of the recited method claims.

Response to Arguments

Applicant's arguments filed June 17, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Moll et al. teaches that having multiple master surgeons and additional support rooms would ensure the master surgeon does not have to scrub in and out of every procedure. Further, the master surgeon may become extremely specialized in performing part of a surgical procedure by performing just that part of a procedure over and over on many more patients than he otherwise would be able to treat. Thus, particular surgical procedures having distinct portions might be performed much more quickly by having multiple surgeons, with each surgeon each performing one part of the procedure and then moving onto another procedure, without scrubbing between procedures. Moreover, if one or more patients (for whatever reason) would benefit by having a surgeon actually be present, an alternative surgeon (different from the master surgeon) may be on call to one or more operating rooms, ready to jump in and address the patient's needs in person, while the master surgeon moves on to treat another patient. Due to increased specialization, further advances in the quality of medical care may be achieved (see Col. 46, Lines 26-52). As broadly as claimed, the combination of

Uchikubo and Moll can be interpreted to read on the recited claims of the present invention.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant further states that the combination of Uchikubo and Moll fails to teach or fairly suggest one or more secondary support rooms for receiving and processing information from the operating room and transmitting a processing result to a primary support room. However, Moll et al. teach of a system which is capable of having multiple master control rooms in which several master surgeons are available to offer support to the surgeon in the operating room. Therefore, it would have been obvious to one skilled in the art that if multiple master control rooms can be imagined, then the system would be inherently capable of having one or more secondary support rooms for receiving and processing information from the operating room and transmitting a processing result to a primary master control room which can then be further transmitted to the operating room as in the recited claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

9/7/05


BEVERLY M. FLANAGAN
PRIMARY EXAMINER